

# ABB BALDOR RELIANCE III

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## Customer information packet

### VEWDM3558

2HP, 1750RPM, 3PH, 60HZ, 56C, 3526M, TEFC, F1, N

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                        |
| <b>Frame</b>                          | 56C                                                         |
| <b>Frame Material</b>                 | Steel                                                       |
| <b>Frequency</b>                      | 60.00 Hz                                                    |
| <b>Haz Area Class and Group</b>       | None                                                        |
| <b>Haz Area Division</b>              | Not Applicable                                              |
| <b>Motor Letter Type</b>              | Three Phase                                                 |
| <b>Output @ Frequency</b>             | 2.000 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | CURUSEEV<br>NEMA PREMIUM                                    |
| <b>Ambient Temperature</b>            | 40 °C                                                       |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                            |
| <b>Auxiliary Box Lead Termination</b> | None                                                        |
| <b>Base Indicator</b>                 | No Mounting                                                 |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                     |
| <b>Blower</b>                         | None                                                        |
| <b>Current @ Voltage</b>              | 2.600 A @ 460.0 V<br>5.200 A @ 230.0 V<br>5.800 A @ 208.0 V |
| <b>Design Code</b>                    | B                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 86.5 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Front Shaft Indicator</b>          | None                                                        |
| <b>Heater Indicator</b>               | No Heater                                                   |
| <b>High Voltage Full Load Amps</b>    | 2.6 a                                                       |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | -          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35S596     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGZ165   |
| <b>Layout</b>       | 35LYS596   |
| <b>Eff. date</b>    | 02-19-2026 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 11-04-2025 |

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Insulation Class</b>              | F                   |
| <b>Inverter Code</b>                 | Inverter Ready      |
| <b>KVA Code</b>                      | K                   |
| <b>Lifting Lugs</b>                  | No Lifting Lugs     |
| <b>Locked Bearing Indicator</b>      | Locked Bearing      |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 18 AWG          |
| <b>Motor Lead Termination</b>        | Flying Leads        |
| <b>Motor Standards</b>               | NEMA                |
| <b>Motor Type</b>                    | 3526M               |
| <b>Mounting Arrangement</b>          | F1                  |
| <b>Number of Poles</b>               | 4                   |
| <b>Overall Length</b>                | 13.23 IN            |
| <b>Power Factor</b>                  | 82                  |
| <b>Product Family</b>                | Wash Down           |
| <b>Pulley End Bearing Type</b>       | Sealed Bearing      |
| <b>Pulley Face Code</b>              | C-Face              |
| <b>Pulley Shaft Indicator</b>        | Standard            |
| <b>Rodent Screen</b>                 | None                |
| <b>RoHS Status</b>                   | ROHS COMPLIANT      |
| <b>Service Factor</b>                | 1.15                |
| <b>Shaft Diameter</b>                | 0.625 IN            |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding  |
| <b>Shaft Rotation</b>                | Reversible          |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger       |
| <b>Speed</b>                         | 1750 rpm            |
| <b>Speed Code</b>                    | Single Speed        |
| <b>Starting Method</b>               | Direct on line      |
| <b>Thermal Device - Bearing</b>      | None                |
| <b>Thermal Device - Winding</b>      | None                |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor |
| <b>Winding Thermal 1</b>             | None                |
| <b>Winding Thermal 2</b>             | None                |

**Nameplate**

| NP1669L      |              |      |     |      |   |       |    |   |  |
|--------------|--------------|------|-----|------|---|-------|----|---|--|
| CAT.NO.      | VEWDM3558    |      |     |      |   |       |    |   |  |
| SPEC.        | 35S596Z165   |      |     |      |   |       |    |   |  |
| HP           | 2            |      |     |      |   |       |    |   |  |
| VOLTS        | 230/460      |      |     |      |   |       |    |   |  |
| AMP          | 5.6/2.8      |      |     |      |   |       |    |   |  |
| RPM          | 1760         |      |     |      |   |       |    |   |  |
| FRAME        | 56C          |      | HZ  | 60   |   |       | PH | 3 |  |
| SER.F.       | 1.15         | CODE | K   | DES  | B | CLASS | F  |   |  |
| NEMA-NOM-EFF | 86.5         | PF   | 78  |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT |      |     |      |   |       |    |   |  |
| CC           | 010A         |      |     |      |   |       |    |   |  |
| DE           | 6205         |      | ODE | 6203 |   |       |    |   |  |
| ENCL         | TEFC         | SN   |     |      |   |       |    |   |  |
| BLANK        | SFA 6.3/3.15 |      |     |      |   |       |    |   |  |

**Parts List**

| Part number  | Description                              | Quantity |
|--------------|------------------------------------------|----------|
| SA444209     | SA 35S596Z165                            | 1.000 ea |
| RA436735     | RA 35S596Z165                            | 1.000 ea |
| 34FN3002B01  | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 ea |
| NS2512A01    | INSULATOR, CONDUIT BOX X                 | 1.000 ea |
| 35CB3008A01G | SPL CONDUIT BOX, MACHINED GRAY           | 1.000 ea |
| 35GS1039     | 05 MOLDED GASKET W/LIP, 1.12 LEAD HOLE,  | 1.000 ea |
| 51XB1016A08  | 10-16X 1/2HXWSSLD SERTYB                 | 2.000 ea |
| 11XW1032G06  | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| 35EP3122B00W | MASTER ODE,203 BRG,.683SH,.125NPT DRNS,F | 1.000 ea |
| HW4072A01    | BLACK DRAIN PLUG FOR .125 NPT            | 3.000 ea |
| HW5100A03    | WAVY WASHER (W1543-017)                  | 1.000 ea |
| 35EP3307E00W | MASTER DE,205 BRG,1.623SH,.125NPT DRNS,C | 1.000 ea |
| HW4072A01    | BLACK DRAIN PLUG FOR .125 NPT            | 3.000 ea |
| HW4600B49    | SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB | 1.000 ea |
| 12XN1032S20  | 10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL | 2.000 ea |
| 51XB1214A16  | 12-14X1.00 HXWSSLD SERTYB                | 1.000 ea |
| 35FH4005A32  | IEC FH NO GRSR W/3 HOLES - PRIMED        | 1.000 ea |
| 11XW1032S06  | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 3.000 ea |
| 35CB4522     | 35 LIPPED CB LID PRIMED                  | 1.000 ea |
| 35GS1030A02  | 35 GS FOR CB LID - WHITE NEOPRENE        | 1.000 ea |
| 59XW0832S07  | TAPTITE II,HEX WSHR UNSLTD SER,410 S.S., | 4.000 ea |
| HW4600B39SP  | V-RING SLINGER 0.550 X 0.790 X .18 VITON | 1.000 ea |
| HW4600B46    | V-RING SLINGER 0.875 X 1.420 X .24 VITON | 1.000 ea |
| HW2502D13    | SS KEY, 3/16 SQ X 1.375                  | 1.000 ea |
| HA7000A04    | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 ea |
| MJ5001A27    | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.001 qt |
| 85XU0407S04  | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea |
| LB1164       | LABEL,WARNING AND DRAIN                  | 1.000 ea |
| HA5027A02    | HA4054 T-DRAIN X2 BAGGED WITH LABEL      | 1.000 ea |
| MJ1000A02    | GREASE, POLYREX EM EXXON                 | 0.050 lb |
| MG1025Z02    | ACTIVATOR WILKOFAS 060.02HF 55 GALLON    | 0.010 ga |

|            |                                          |          |
|------------|------------------------------------------|----------|
| MG1025W01  | WILKOFEST, 781.01, SIGNAL WHITE #9003    | 0.017 ga |
| HA3100S07  | THRUBOLT 10-32 X 8.375 SS                | 4.000 ea |
| LB1624     | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LC0005     | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING  | 1.000 ea |
| NP1669L    | SS WD SUPER-E UL PREM REV MTG            | 1.000 ea |
| 35PA1066   | PKG GRP, PRINT PK1008A07                 | 1.000 ea |
| PK3082     | STYROFOAM CRADLE                         | 1.000 ea |
| PK3088     | MICROFOAM, 8"X"8 PERF. SHEETS            | 1.000 ea |
| MN416A01   | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |
| FE-0000001 | ZRTG FE ASSEMBLY                         | 1.000 ea |
| PE-0000002 | ZRTG PE ASSEMBLY                         | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 114535

Typical performance - not guaranteed values

| Winding: 35WGZ165-R001 |    |         | Type: 3526M                              |                     | Enclosure: TEFC           |            |      |
|------------------------|----|---------|------------------------------------------|---------------------|---------------------------|------------|------|
| Nameplate Data         |    |         | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |            |      |
| Rated Output (HP)      |    | 2       | Full Load Torque                         |                     | 5.979 LB-FT               |            |      |
| Volts                  |    | 230/460 | Start Configuration                      |                     | direct on line            |            |      |
| Full Load Amps         |    | 5.2/2.6 | Breakdown Torque                         |                     | 18.4 LB-FT                |            |      |
| R.P.M.                 |    | 1750    | Pull-up Torque                           |                     | 13.7 LB-FT                |            |      |
| Hz                     | 60 | Phase   | 3                                        | Locked-rotor Torque |                           | 14.5 LB-FT |      |
| NEMA Design Code       |    | B       | KVA Code                                 |                     | K                         |            |      |
| Service Factor (S.F.)  |    | 1.15    | No-load Current                          |                     | 1.24 A                    |            |      |
| NEMA Nom. Eff.         |    | 86.5    | Power Factor                             |                     | 82                        |            |      |
| Rating - Duty          |    | 40C     | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |            | 59°C |
| S.F. Amps              |    | 6/3     |                                          |                     | Temp. Rise @ S.F. Load    |            | 75°C |
|                        |    |         |                                          |                     | Locked-rotor Power Factor |            | 59.3 |

**Load Characteristics 460 V, 60 Hz, 2 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 42     | 64     | 76     | 82     | 86     | 87     | 84   |
| Efficiency      | 82.7   | 87.6   | 87.8   | 86.6   | 84.6   | 82     | 85.4 |
| Speed           | 1788.4 | 1776.9 | 1763.5 | 1748.9 | 1731.7 | 1711.8 | 1739 |
| Line amperes    | 1.35   | 1.65   | 2.09   | 2.61   | 3.21   | 3.91   | 2.97 |

ABB Motors and Mechanical Inc.

WINDING # 35WGZ165

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1750 RPM 460 V 3526M

TORQUES (LB-FT): PO=18.4 PU=13.7 LR=14.5 LRA=17.9







